



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,463

01/23/2007

James Cameron Taylor

014574-000019

1093

24239 7590 05/08/2008

MOORE & VAN ALLEN PLLC

P.O. BOX 13706

Research Triangle Park, NC 27709

EXAMINER

NGUYEN, JIMMY T

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

05/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,463	<b>Applicant(s)</b> TAYLOR ET AL.	
	<b>Examiner</b> JIMMY T. NGUYEN	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/23/07.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/8/06&amp;8/9/06</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

Receipt is acknowledged of an Information Disclosure Statement (I.D.S.), filed 08 August 2006 and 9 August 2006, which I.D.S. have been placed of record in the file. The initialed, signed and dated copies of the forms PTO-1449 are attached to this Office action.

### ***Specification***

**The disclosure is objected to because it fails to include section headings.**

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.

Art Unit: 3725

- (1) Field of the Invention.
- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

**The specification is further objected to** because it fails to disclose cross reference to related applications as disclosed in the Oath/Declaration filed January 23, 2007.

**The abstract of the disclosure is objected to** because it is not presented on a separate sheet, **apart from any other text** (emphasis added).

### *Claim Objections*

Claim 7 is objected to because of the following informalities:

In line 3, the word "whilst" should be changed to -- while -- in order to conform with US practice. Appropriate correction is required.

Also note that the word "whilst" in various dependent claims should also need to be corrected.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 2, it is unclear whether “each conveyor” is referring to one of the conveyors as claimed in lines 1-2 or it is referring to a different conveyor. If it is referring to the conveyors as claimed in lines 1-2, the Examiner suggests this limitation be changed to “each of the conveyors”. Additionally, it is suggested that other limitations of “each conveyor” in the dependent claims should also be changed to “each of the conveyors”.

Regarding claim 49, line 2, there is no antecedent basis for the limitation, “the first end” in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-6, 35-37, 39, 40-49, 52-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Pentith (US 4,262,478).**

Regarding claims 1, 2, 35-37, 39-40, 43, and 53, Pentith discloses a baling apparatus and a method of baling material comprising first and second mutually opposed and inclined conveyors (19 and 24), each of the conveyor having a first end and a second end (fig. 1), the second ends being arranged to be spaced apart to form a material entry region into which material to be baled is, in use, deposited (fig. 2), the first ends being relatively closely adjacent to each other (fig. 2), and the apparatus being arranged such that material deposited into the entry region moves toward a pinch region (fig. 2) where the two conveyors are closed to one another (fig. 2) and where the deposited material is rolled and compressed into a bale (fig. 2), the conveyors being driven in opposite directions (fig. 2) to roll and compact the material between them, and the conveyors being mutually displaceable (figs. 2-3) and resiliently biased (22, 27) toward one another. Each of the conveyors comprises a plurality of rollers (fig. 2) which extends a continuous belt (fig. 2). The conveyors is provided in a V formation (fig. 2), the first ends forming a base of the V, and the second ends forming the top of the V (fig. 2). The conveyors being arranged so as to bow outwardly as the circumference of baled material held between them increases (figs. 2, 3), means are provided for gathering (10) material falling outside of the entry region. A bale wrapping mechanism (32).

Regarding claim 3, each conveyor comprises at least a pair of end rollers (fig. 2), defining outer limits of the conveyor (fig. 2) and at least one intermediate roller (see the upper roller of the conveyor (19, 24)). Note that the claim does not define that the intermediate roller is a different roller from the end roller and it does not recite that the intermediate roller is located between the end rollers; therefore, the Examiner broadly interprets that the upper roller of each

of the conveyors is an intermediate roller in the baler because they are positioned between top rollers of the conveyor (16) and their respective bottom rollers.

Regarding claims 41, 42, 44, and 45, material deposited is moved from a relatively wide entry region (fig. 2) to the narrow pinch region where the material is compacted and rolled (fig. 2), the movement from the wide entry region to the narrower compaction region maybe under friction pressure (i.e. friction pressure from the surface of the conveyors), wherein as more material is deposited, the pinch region is arranged to expand against the action of the resilient biasing to compress material within the pinch region (figs. 2, 3) and the entry region is arranged to expand (fig. 3) to allow entry of more material.

Regarding claims 4-6, 46 and 47, in figure 3, Pentith discloses the first conveyor (19) is driven directly by a drive element (figs. 2, 3), and the second conveyor does not have a drive element connected directly thereto. Therefore, the first conveyor is inherently running faster than the second conveyor and the belt of the first conveyor runs in a direction to urge material from the entry region toward the pinch region (fig. 2).

Regarding claim 48, wherein in an initial state, at least one pair of opposed rollers (figs. 1, 2) of the two conveyors (19, 24) have central axes which are vertically displaced from one another (figs. 1, 2), and are separated horizontally from each other by a horizontal distance which is less than a sum of the radii of the respective two rollers (fig. 2).

Regarding claim 49, the opposed rollers in question comprise rollers at a first end of the conveyors (fig. 2).

Regarding claim 52, in an initial state, at least one pair of opposed rollers of the two conveyors have central axes which are vertically displaced from one another (figs. 1-2), and are

Art Unit: 3725

separated horizontally from each other by a horizontal distance which is less than a sum of the radii of the respective two rollers (fig. 2).

Regarding claim 54, means are provided for wrapping baled material (32) following a compaction operation.

Regarding claim 55, wherein removal of compacted material may be carried out following the end of a baling operation by spreading second ends of the conveyors (fig. 4).

Regarding claim 56, wherein spreading comprises disengaging at least one second end from associated resilient biasing means to allow said at least one second end to be freely moved away from the second end of the other conveyor (fig. 4).

Regarding claim 57, wherein spreading comprises disengaging an associated resilient biasing means from a fixed chassis mounting point to allow both the resilient biasing means and the associated second end of conveyor to move (fig. 4).

Regarding claim 58, wherein spreading comprises pivoting one conveyor away from the other (fig. 4).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3-11, 14-34, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pentith in view of Groeneveld et al (hereinafter “Groe”) (US 4,549,481).**



Regarding claims 3-6, 28-34, and 50-51, in the event that claim 3 is meant to recite that the intermediate roller is part of the conveyor and the intermediate roller is located between the end rollers, the following rejections can be applied.

Pentith discloses the invention substantially as claimed as set forth above except for an intermediate roller between the end rollers of each of the conveyors. However, the patent to Groe, teaches that it is old and well known to provide a baler with a type of conveyor having at least one intermediate roller (26) between end rollers (22 and 28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the conveyors of Pentith with the type of conveyor (i.e. having at least one intermediate roller between end rollers) as taught by Groe, since such type of conveyor is old and well known in the baling art and such conveyor would provide more support on a bale, thus improving a baling operation.

Regarding claims 7-11, 14-18, Pentith, as modified by Groe, discloses the conveyors, each having the intermediate roller as set forth above. Therefore, the intermediate rollers and the rollers at the second end are biased by resilient biasing means (22, 27) such that they (i.e. the rollers at the first end) may travel along fixed path guides by guide means (figs. 2 and 3) as more material is deposited into the entry region (figs. 2 and 3).

Regarding claims 19-24, Pentith discloses movement of the first conveyor away from the second conveyor at the second end (fig. 4).

Regarding claims 25-27, Pentith, as modified by Groe as set forth above, discloses two intermediate rollers (24 and 26).

***Allowable Subject Matter***

Claims 12-13 and 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art listed on the attached PTO 892 are cited to show relevant balers using conveyors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JIMMY T. NGUYEN whose telephone number is (571)272-4520. The examiner can normally be reached on Monday-Thursday 7:30am-5:00pm with alternating Fri. 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272- 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTNguyen  
May 07, 2008

/JIMMY T. NGUYEN/  
Primary Examiner  
Art Unit 3725